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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/916,174	07/26/2001	Jochen Burgdorf	AP9974/64098-878	7113

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EXAMINER

BURCH, MELODY M

ART UNIT	PAPER NUMBER
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3683

DATE MAILED: 04/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,174

Applicant(s)

BURGDORF ET AL.

Examiner

Melody M. Burch

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Priority

1. Acknowledgment is made of applicant's claim for foreign priority based on an applications filed in Germany on 4/3/01 and 10/18/00. It is noted, however, that applicant has not filed a certified copy of the German applications as required by 35 U.S.C. 119(b).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the brake disc first claimed in line 2 of claim 10 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities: the use of claim language such as "said" used, for example on pg. 6 line 2 is improper.

Appropriate correction is required.

Claim Objections

4. Claims 11-18 are objected to because of the following informalities: in line 1 of the claims "Spot-type disc brake" should be changed to --The spot-type disc brake assembly--. Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 10-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re: claim 10, 13, and 14. The phrases "said brake lining" first appearing in but not limited to line 4 of claim 10 and "the brake lining" in line 3 from the bottom of claim 10 are indefinite. The above phrases limit the amount of brake linings to one, however, in line 3 of claim 10, the language recites "at least one brake lining" which encompasses the possibility of more than one brake lining.

Re: claim 10. The phrase "the spot-type disc brake" in line 2 from the bottom of the claim is indefinite. It is unclear to the Examiner whether Applicant intends to claim the spot-type disc brake *assembly* or not.

Re: claim 10. The phrase "wherein the spring which is secured detachably to the spot-type disc brake and is supported on the brake lining, and on a first portion brake housing" in the last 2 lines of the claim is unclear. Rewording is required.

Re: claim 12. The phrases "a brake lining" and "at least one actuating device" in line 2 are indefinite. It is unclear to the Examiner whether the "brake lining" of claim 12 is intended to be the same or different from that claimed in claim 10. Similarly, It is unclear to the Examiner whether the "at least one actuating device" of claim 12 is intended to be the same or different from that claimed in claim 10. If the elements in claim 12 are intended to refer back to the corresponding elements originally claimed in claim 10, then the elements in claim 12 should be preceded with "the" or "said".

Re: claim 13. The phrase "recess the brake lining" in the last two lines of the claim is unclear. Rewording is required.

Re: claim 14. The phrases "two actuating devices" in the last line of the claim is indefinite. It is unclear to the Examiner whether the "two actuating devices" of claim 14 are intended to be the same or different from the "at least one actuating device" claimed in claim 10.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 10-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Anda et al.

Re: claims 10-12 and 17. Anda et al. show in figures 1-3 a spot-type disc brake assembly comprising a brake housing 14,21 adapted to straddle a brake disc 11, at least one brake lining 12,24;13,25 arranged in the brake housing so as to be slidable in an actuating direction, wherein the at least one brake lining cooperates tribologically with the brake disc upon brake application, at least one actuating device 17,18 arranged in the brake housing to apply an actuating force to the brake lining, a spring 26 for adjusting a clearance between the brake lining and the brake disc, wherein the spring which is secured detachably to the spot-type disc brake assembly and is supported on the brake lining and on a first portion of the brake housing.

Re: claim 13. Anda et al. show in figure 3 the spring including a first end portion 29 which resides in a portion of an accommodation recess 25a of the brake lining.

Re: claim 14. Anda et al. show in figures 1 and 3 the limitation wherein the first end portion of the spring is supported on the brake lining in a circumferential direction (via the circumferential stopping function of the walls of the accommodation recess 25a located on either side of portion 29 of the spring) between two actuating devices 17 and 18.

Re: claim 15. Anda et al. show in figures 1, 3, and 4 the spring including a second end portion 27b,27c, and wherein the spring is configured as a tension spring (axial tension F1 shown in figure 4) that is suspended with the second end portion engaged to the brake housing.

Re: claim 16. Anda et al. show in figures 1, 3, and 4 the spring being designed as a compression spring (radial compression F2 shown in figure 4) having an end portion which is detachably fastened to the brake housing.

9. Claims 10-12, 17, and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Klimt et al.

Re: claim 10-12, 17. Klimt et al. show in figures 6, 7, 11, and 12 a spot-type disc brake assembly comprising a brake housing 102 shown in figure 7 adapted to straddle a brake disc 118, at least one brake lining 116 arranged in the brake housing so as to be slidable in an actuating direction, wherein the at least one brake lining cooperates tribologically with the brake disc upon brake application, at least one actuating device 113 arranged in the brake housing to apply an actuating force to the brake lining, a spring 165 shown in figures 11 and 12 capable of adjusting a clearance between the brake lining and the brake disc via deflectable means 177, 175 and the spring connection to the brake lining at element 180 as disclosed in col. 12 line 5 wherein the spring which is secured detachably to the spot-type disc brake assembly and is supported on the brake lining and on a first portion of the brake housing.

Re: claim 18. Klimt et al. show in figures 11 and 12 at least one mid-portion (mid-portion circumferentially with respect to element numbers 175 on each side of the spring 165) being conformed to a "S" shape as shown in the attached copy of figure 11 of Klimt et al., and wherein an end portion of the spring is supported on the brake housing in a circumferential direction as clearly shown in figure 12.

10. Claims 10 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Stoka. Stoka shows in figures 1 and 2 a spot-type disc brake assembly comprising a brake housing 4,9 adapted to straddle a brake disc 1, at least one brake lining 3,5,6 arranged in the brake housing so as to be slidable in an actuating direction, wherein the at least one brake lining cooperates tribologically with the brake disc upon brake application, at least one actuating device 20 arranged in the brake housing to apply an actuating force to the brake lining, a compression spring 16 for adjusting a clearance between the brake lining and the brake disc wherein the spring which is secured detachably to the spot-type disc brake assembly and is supported on the brake lining via the intervening elements as shown and on a first portion of the brake housing.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Patents: 5257679 to Weiler et al. and 4677420 to Topic et al. teach the use of disc brakes having dual pistons (Topic et al. teaches the pistons being located on the same side of the housing), 4669583 to Mery and 5358079 to Brown teach the use of disc brakes having centrally located springs, 5494139 to Le Deit et al. teach the use of a disc brake having particular connections of the spring, 4702351 to Price et al., 4354581 to Birkenbach et al., 5251727 to Loeffler et al., 4085827 to Kestermeier, 3722634 to Ogasawara et al., 4516666 to Sheill, 4673065 to Gerard et al., 3841444 to Baum et al., 4342381 to Tamura, 5069313 to Kato et al., 5310024 to